

COUNTY OF SAN DIEGO

GUIDELINES FOR DETERMINING SIGNIFICANCE

AIRPORT HAZARDS



LAND USE AND ENVIRONMENT GROUP

Department of Planning and Land Use
Department of Public Works

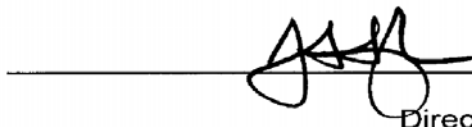
July 30, 2007

APPROVAL

I hereby certify that these **Guidelines for Determining Significance for Airport Hazards** are a part of the County of San Diego, Land Use and Environment Group's Guidelines for Determining Significance and were considered by the Director of Planning and Land Use, in coordination with the Director of Public Works on the 30th day of July, 2007.



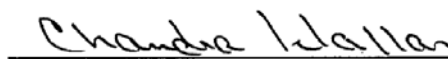
ERIC GIBSON
Interim Director of Planning and Land Use



JOHN SNYDER
Director of Public Works

I hereby certify that these **Guidelines for Determining Significance for Airport Hazards** are a part of the County of San Diego, Land Use and Environment Group's Guidelines for Determining Significance and have hereby been approved by the Deputy Chief Administrative Officer (DCAO) of the Land Use and Environment Group on the 30th day of July, 2007. The Director of Planning and Land Use is authorized to approve revisions to these Guidelines for Determining Significance for Airport Hazards except any revisions to the Guidelines for Determining Significance presented in Section 4.0 must be approved by the DCAO.

Approved, July 30, 2007



CHANDRA WALLAR
Deputy CAO

EXPLANATION

These Guidelines for Determining Significance for Airport Hazards and information presented herein shall be used by County staff for the review of discretionary projects and environmental documents pursuant to the California Environmental Quality Act (CEQA). These Guidelines present a range of quantitative, qualitative, and performance levels for particular environmental effects. Normally, (in the absence of substantial evidence to the contrary), non-compliance with a particular standard stated in these Guidelines will mean the project will result in a significant effect, whereas compliance will normally mean the effect will be determined to be “less than significant.” Section 15064(b) of the State CEQA Guidelines states:

“The determination whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on factual and scientific data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.”

The intent of these Guidelines is to provide a consistent, objective and predictable evaluation of significant effects. These Guidelines are not binding on any decision-maker and do not substitute for the use of independent judgment to determine significance or the evaluation of evidence in the record. The County reserves the right to modify these Guidelines in the event of scientific discovery or alterations in factual data that may alter the common application of a Guideline.

LIST OF PREPARERS AND TECHNICAL REVIEWERS

County of San Diego

Joe Farace, DPLU, Primary Author
Jennifer Campos, DPLU Contributing Author
Jason Giffen, DPLU, Contributing Author
Eric Gibson, DPLU, Contributing Author
Eric Nelson, DPW Airports, Technical Review
Peter Drinkwater, DPW Airports, Technical
Review

Airport Hazards Technical Review Panel

Ron Bolyard, Division of Aeronautics, California
Department of Transportation
Paul Webb, San Diego Regional Airport
Authority
Victor Globa, Environmental Protection
Specialist, Los Angeles Airports District
Office, Airport Division, Western-Pacific
Region, Federal Aviation Administration

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List of Acronyms

AB	Assembly Bill
AICUZ	Air Installations Compatible Use Zones
AIA	Airport Influence Area
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
Caltrans	California Department of Transportation
CDF	California Department of Forestry and Fire Protection
CEQA	California Environmental Quality Act
CLUP	Comprehensive Land Use Plan
CNEL	Community Noise Exposure Level
DOD	Department of Defense
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FATO	Final Approach and Takeoff Area
NEPA	National Environmental Policy Act
PUC	Public Utilities Code
SANDAG	San Diego Association of Governments
SB	Senate Bill
SRA	State Responsibility Area
Authority	San Diego County Regional Airport Authority

INTRODUCTION

This document provides guidance for evaluating adverse environmental effects that a proposed project within the vicinity of a public airport, public use airport, or private airport may have related to airport hazards. These guidelines focus on proposed projects within an Airport Influence Area (AIA) for Public airports subject to an Airport Land Use Compatibility Plan (ALUCP) or Comprehensive Land Use Compatibility Plan (CLUP) or where no ALUCP or CLUP has been prepared, within two miles of a public or public use airport or one mile of a private airstrip. Specifically, this document addresses the following questions listed in the California Environmental Quality Act (CEQA) Guidelines, Appendix G, Section VII, Hazards and Hazardous Materials and Section XV, Traffic:¹

VII – Hazards and Hazardous Materials

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

XV – Transportation/Traffic

- c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

1.0 GENERAL PRINCIPLES AND EXISTING CONDITIONS

An airport is defined as any area of land or water that is used or intended for landing and take-off of aircraft, including any appurtenant areas which are used or intended for use for airport buildings, facilities, or rights-of way. Heliports, helipads and helistops are considered airports for the purpose of this document. This document makes reference to public airports, public use airports and private airports. Definitions for these types of airports are as follows:²

A **public airport** is an airport that is used or intended to be used for public purposes which is under the control of a public agency and the areas used or intended to be used for the landing, taking off, or surface maneuvering of aircraft are publicly owned.

¹ Unless otherwise specified, the term “airport hazards” is used in these Guidelines to refer collectively to both Hazards and Hazardous Materials and Transportation and Traffic concerns under Sections VII and XV of Appendix G to the CEQA Guidelines related to aircraft operations near airports.

² Public airport, public use airport and private airport definitions are derived from 49 U.S.C. Section 47102 and the State Aeronautics Act, Public Utilities Code Section 21001, et seq.

A **public use airport** is either:

- (A) a public airport; or
- (B) a privately-owned airport used or intended to be used for public purposes that is:
 - (i) a reliever airport; or
 - (ii) has at least 2,500 passenger boardings each year and receives scheduled passenger aircraft service.

A **private airport** is an airport that is privately owned or which allows some public use, but not to the level of a public use airport.

Airports in the County of San Diego are shown in Figure 1, Airports and Heliports in San Diego County. The County of San Diego owns and operates eight public airport properties including Agua Caliente Airstrip, Borrego Valley Airport, Fallbrook Airpark, Gillespie Field Airport, Jacumba Airport, McClellan-Palomar Airport, Ocotillo Airport and Ramona Airport. The City of San Diego owns and operates Brown Field and Montgomery Field airports; however, the land surrounding Brown Field is within the land use jurisdiction of the County. Table 1 identifies the location and operating characteristics of the eight airports operated by the County of San Diego.

Table 1 - San Diego County Operated Airports

Airport	Location	Runway Length (feet)	Annual Operations		Based Aircraft	Acreage
			2006	2025 ⁺		
County owned airports located within unincorporated County						
Agua Caliente	Desert Subregion	2,500	650	4,000	1	160 ²
Borrego Valley	Desert Subregion	5,000	20,853	50,000	23	200
Fallbrook	Fallbrook	2,165	32,586	51,700	112	293 (County owned) 7.3 (easement)
Jacumba	Mountain Empire	2,985	325	4,100	0	131
Ocotillo	Desert Subregion	4,210	405	2,900	0	351
Ramona	Ramona	4,000	155,121	197,000	214	378 (County owned) 23 (easement)
County owned airports located in incorporated areas						
Gillespie Field	City of San Diego	5,340	283,355		740	775
McClellan-Palomar*	City of Carlsbad	4,900	201,220		426	487

Notes:

* Asterisk denotes airports that include a heliport

⁺ Projections from Airport Land Use Compatibility Plan, August 2006 draft

⁺⁺ Leased land

Aviation is a vital link in the transportation system. It provides a gateway to the world and plays a key role in the economy as businesses use the speed and reliability of air service to achieve operating efficiency. Airports are critical for providing services, such as business travel, tourism, recreation, emergency response, fire suppression, and law enforcement. Airports, airlines, and businesses that support airports provide direct and indirect jobs and income throughout the State. Aviation provides tangible and intangible benefits, such as quality of life and enhanced mobility. One of the greatest concerns facing airports today is the continued pressure brought about by inappropriate land use that threatens and limits the operations of an airport. The importance and valuable contributions of airports requires that land use planning considers the effect that land use decisions will have on airport operations. Without proper land use planning, airport operations can become unsafe and land uses surrounding airports can become unsafe places for residents and workers.

1.1 Airport Land Use Compatibility Plan (ALUCP)

The San Diego County Regional Airport Authority (Authority)³ is responsible for developing Airport Land Use Compatibility Plans (ALUCP) for public airports in San Diego County to promote land use compatibility and ensure operations are not restricted by encroachment of incompatible land uses. Specifically, the purpose of an ALUCP is to (1) provide for the orderly growth of each public airport and the area surrounding the airport; and (2) safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general. An ALUCP describes the airport, its projected uses, and the noise, safety, airspace protection and overflight contours (generated through airport use) over adjoining land.

ALUCPs are developed by the Authority in conjunction with the airport operator/owner and the jurisdictions impacted by the airport. An ALUCP Technical Advisory Group (ATAG) was formed by a motion of the Authority's Board in November 2005 to enable interested parties to express their concerns to Authority staff in a fair, open and transparent process. The ATAG includes representatives from local cities, San Diego County, other government agencies, airport operators, the military, private property owners and their attorneys, pilots groups, economic development organizations, community planning groups and professional land use associations.

Currently, there are six adopted ALUCPs for public airports in San Diego County: Agua Caliente, Borrego Valley, Fallbrook Airpark, Jacumba, Ocotillo Wells, and Ramona Airport. The ALUCPs were adopted by the Authority on December 4, 2006. These ALUCP are updates to previous airport land use plans that were referred to as Comprehensive Land Use Compatibility Plans (CLUPs). CLUPs currently exist for Brown Field, Gillespie Field and McClellan-Palomar Airport. Until ALUCPs are completed for all public airports in San Diego County, the CLUP will remain the primary airport land use planning tool for those airports without an adopted ALUCP.

³ See section 1.5.3 for further discussion of the Authority.

1.1.1 Airport Influence Area (AIA)

An important part of the ALUCP is the establishment of an Airport Influence Area (AIA). An AIA is the area in which existing or future airport-related noise, overflight, safety and/or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses. Noise¹ related concerns are associated with cumulative noise exposure from aircraft operations near an airport. Noise contours are modeled to identify areas in the AIA that are potentially adversely affected by current and forecasted aircraft landings and take-offs. Overflight concerns are associated with the impacts and risks of routine aircraft flight over a community based on established and forecasted traffic patterns. Safety concerns target minimizing the risks of aircraft accidents beyond the current and future runway environment. Air space protection is accomplished by placing limits on height of structures and other objects in the airport vicinity and restrictions on other uses that potentially pose hazards to flights now and in the future.

Safety compatibility zones identify areas where distinct levels of risk exist. As a result of the distinct levels of risk in each safety compatibility zone, ALUCPs and CLUPs differentiate allowed and prohibited land uses according to safety compatibility zones. The shapes and sizes of the zones are largely based on accident data and other analyses prepared by the Federal Aviation Administration (FAA). Data has shown that a higher percentage of crashes occur at each end of a runway, with a lower percentage occurring along the length of a runway. As a result, ALUCPs and CLUPs typically restrict land uses to a greater degree at each end of a runway.

1.2 Airports without an ALUCP or CLUP

If no ALUCP/CLUP exists, an estimated AIA is assumed using a conservative estimate of a 2 mile radius for a public or public use airport and a 1 mile radius for a private airport. The 2 mile radius for public and public use airports is based on the distances identified in the Appendix G of the State CEQA Guidelines. The one mile radius is based on general guidance included in the Caltrans Airport Planning Handbook.

ALUCPs and CLUPs utilize State and Federal safety standards to regulate development intensity and obstructions near airports. These standards are applicable to airports whether or not an ALUCP or CLUP has been adopted.

1.3 Land Use Safety

1.3.1 Development Intensity

Development intensity relates to the placement of structures in areas adjacent to existing airports that may increase the probability of a loss of human life, if an airplane crash was to occur. Development intensity is regulated through the use of safety

¹ Noise related impacts from airports and aircraft are addressed in the “Guidelines for Determining Significance for Noise.”

compatibility zones². A safety compatibility zone is an area near an airport in which land use restrictions are established to protect the public from potential aircraft accidents. The size and location of a safety compatibility zone varies based on runway lengths and air traffic patterns. The Caltrans Division of Aeronautics has incorporated general guidance for establishing safety zones in the California Airport Land Use Planning Handbook (Table 2).

Table 2 - Safety Zone Guidelines

Safety Zone		Safety Zone Guidelines
Zone 1	Runway protection zone	Maintain all undeveloped land clear of objects in accordance with FAA standards.
Zone 2	Inner approach departure zone	Seek to preserve 25% to 30% of the overall zone as usable open land. Particular emphasis should be given to preserving as much open land as possible in locations close to the extended runway centerline.
Zone 3	Inner turning zone	At least 15% to 20% of the zone should remain as open land.
Zone 4	Outer approach/ departure zone	Maintain approximately 15% to 20% open land within the overall zone, again with emphasis on areas along the extended runway centerline.
Zone 5	Sideline zone	Adjacent to the runway ends and runway protection zones, 25% to 30% usable open land is a desirable objective.
Zone 6	Traffic pattern zone	Elsewhere within the airport environment, approximately 10% usable open land or an open area approximately every ¼ to ½ mile should be provided.

1.3.2 Obstruction Standards

Obstruction standards relate to the placement of tall structures, visual hazards, electronic hazards, artificial bird attractors, or other land uses that would pose a potential danger to aircraft flight. Obstruction standards are regulated by height and whether a proposal is distractive and/or hazardous to a pilot (e.g. will the proposal interfere with a pilot's sight, an airplane's frequency and communication link, or promote an increase in the number of birds or other hazardous wildlife). The FAA, Federal Aviation Regulation (FAR) Part 77, establishes standards for determining obstructions in navigable airspace and sets forth the requirements for noticing the FAA of certain proposed construction or alteration. FAA notification is required at least 30 days prior to the start of construction; however, notification provided as early as possible in the planning stage is desired to identify potential conflicts and minimize adverse impacts to aviation safety. Notification to the FAA is typically provided by Form 7460-1, Notice of Proposed Construction or Alteration. The following are examples of project types which currently require FAA notification:

² The California Land Use Airport Planning Handbook illustrations of Safety Compatibility Zones can be found in Figure 2 of this document. A copy of the handbook is available online at <http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/landuse.php>.

- a. Any proposed construction or alteration on an airport or heliport, or military airport, regardless of height or location;
- b. As detailed in Advisory Circular AC70/7460-2K dated March 1, 2000, Proposed Construction or Alteration of Objects that May Affect the Navigable Airspace⁴, notice to the FAA is required if a project proposes any of the following:
 - any construction or alteration exceeding 200 ft above ground level
 - any construction or alteration within 20,000 ft of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 ft; within 10,000 ft of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 ft; and; within 5,000 ft of a public use heliport which exceeds a 25:1 surface
 - any highway, railroad or other traverse way whose prescribed adjusted height would exceed that above noted standards
 - when requested by the FAA
 - any construction or alteration located on a public use airport or heliport regardless of height or location;
- c. Projects located within 2 miles of a public or public use airport that proposes any of the following:
 - Sources of glare (such as from mirrored or other highly reflective buildings or building features) or bright lights (including search lights and laser light displays);
 - Distracting lights that could be mistaken for airport lights;
 - Sources of dust, steam, or smoke that may impair pilot visibility; or
 - Sources of electrical interference with aircraft communications or navigation; and,
- d. Projects located within 10,000 feet of an airport that serves turbine powered aircraft (e.g., Gillespie Field, McClellan-Palomar Airport, and Ramona Airport) or within 5,000 feet of an airport that does not serve turbine powered aircraft that proposes any of the following:
 - A waste disposal operation (e.g. landfill);
 - A use that would involve standing water (e.g. pond, wetland);
 - Agriculture that attracts wildlife (e.g. confined animal facilities, aquaculture, grains);
 - A golf course; or
 - Any landscape feature that could attract wildlife.⁵

⁴ Advisory Circular AC70/7460-2K dated March 1, 2000, Proposed Construction or Alteration of Objects that May Affect the Navigable Airspace is included as Attachment B and is available online at [http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/22990146db0931f186256c2a00721867/\\$FILE/ac70-7460-2K.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/22990146db0931f186256c2a00721867/$FILE/ac70-7460-2K.pdf)

1.4 Heliports not Subject to an ALUCP or CLUP

Helicopter operations are addressed in ALUCPs and CLUPs for public airports. For heliports not covered by an ALUCP or CLUP, the FAA Heliport Design Advisory Circular (AC 150/5390-2B) last updated in September 30, 2004, provides guidance with respect to the design of the touchdown and liftoff pad for helicopters and requirements for obstruction-free approach/departure paths. The AC establishes helipad protection zones for public use facilities. These zones, equivalent to runway protection zones at airports, extend 280 feet from the edge of the Final Approach and Takeoff Area (FATO). A FATO is generally larger than the physical pad itself and its size usually depends on the size of the helicopters that will utilize the helipad. As with runway protection zones, the helipad protection zone should be clear of incompatible objects and any land uses involving a congregation of people.

1.5 Agency Roles and Responsibilities

There are agencies at the Federal, State, and local levels that are responsible for managing airports and preventing airport hazards. These agencies' roles and responsibilities are outlined below.

1.5.1 Federal Aviation Administration (FAA)

At the Federal level, the FAA has primary responsibility for the safety of civil aviation. The FAA's major functions include:

- Regulating civil aviation to promote safety and fulfill the requirements of national defense;
- Encouraging and developing civil aeronautics, including new aviation technology;
- Developing and operating a common system of air traffic control and navigation for both civil and military aircraft;
- Research and development with respect to the National Airspace System and civil aeronautics;
- Developing and implementing programs to control aircraft noise and other environmental effects of civil aviation;
- Regulating U.S. commercial space transportation; and
- Conducting reviews to determine that the safety of persons and property on the ground are protected.

⁵ Advisory Circular 150/5200-33, Hazardous Wildlife Attractants On or Near Airports describes the land use types that could pose safety risks near airports and is available online at [http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/51eb9ab12a224e8586256f160052c678/\\$FILE/150-5200-33A.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/51eb9ab12a224e8586256f160052c678/$FILE/150-5200-33A.pdf). FAA Advisory Circular 150/5200-33 states that airports that sell Jet-A fuel usually serve turbine powered aircraft, thus this criteria is used to identify those airports that serve turbine powered aircraft.

1.5.2 California Department of Transportation (Caltrans), Division of Aeronautics

Caltrans, Division of Aeronautics, assists in the development and preservation of a safe and environmentally compatible air transportation system that meets the economic needs of California. The Division of Aeronautics is responsible for:

- Permitting certain airports and heliports; including inspecting airports and heliports for compliance with safety standards, and performing other safety functions;
- Providing airports with technical assistance in airport design, maintenance, and administration;
- Developing and updating a plan that coordinates the State's aviation system;
- Providing State grants and loans to cities, counties, districts, and ALUCs for airport development, pavement maintenance, and preparation of ALUCPs; and
- Administering California Airport Noise Program regulations, reviewing California Environmental Quality Act (CEQA) documents for projects at or near airports, and technical assistance to ALUCs so the environmental impact of airports is minimized.

1.5.3 San Diego Regional Airport Authority (Authority)

To promote compatibility between airports and the surrounding land uses, the California Public Utilities Code (Sections 21670 et seq.) authorizes an Airport Land Use Commission (ALUC) to be established in any county with public use airports. In San Diego, the ALUC is the Authority.⁶ Prior to 2002, the San Diego Association of Governments (SANDAG) was the ALUC. The Authority was created to operate the San Diego International Airport and lead the regional strategic planning effort to meet air transportation service demands in San Diego County. The Authority is required to develop and adopt ALUCPs incorporating all of San Diego County's airports and develop plans to accommodate the region's future aviation needs.

State statutes give ALUCs the following powers and duties:

- To assist local agencies in ensuring compatible land use in the vicinity of airports to the extent that the land in the vicinity of the airports is not already devoted to incompatible land uses;
- To coordinate planning at the state, regional and local levels, so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety and welfare;
- To prepare and adopt an airport land use compatibility plan; and
- To review the plans, regulations, and certain other actions of local agencies and airport operators for consistency with that plan.

⁶ Public Utilities Code Section 170000, et seq.

With regard to the last bullet, state law requires each local agency having jurisdiction over land uses within an ALUC planning area to modify its general plan and any affected specific plans to be consistent with the compatibility plan. The County of San Diego is currently in the process of updating its general plan and has worked with the Authority to assure that the future general plan will be consistent with adopted ALUCPs. Regardless of general plan/ALUCP consistency, State law requires that certain land use actions within an AIA always be forwarded to ALUC for review. These include general plan amendments, specific plans, specific plan amendments and zone reclassifications.

2.0 EXISTING REGULATIONS AND STANDARDS

There are several existing laws, regulations, policies and programs that protect the safety of people residing or working near airports. The following list details the most significant Federal, State and local laws, regulations, policies and programs that address airport safety in the United States, California and San Diego County. This list is not exhaustive and is provided for informational purposes only.

2.1 Federal Regulations, Standards, and Noticing Requirements

National Environmental Policy Act ⁷

Federal agencies that implement the National Environmental Policy Act (NEPA) must consider airport hazards when assessing environmental impacts of proposed Federal projects.

Federal Aviation Regulations (FAR), Notice of Proposed Construction or Alteration ^{8,9}

The FAA imposes height restrictions in order to prevent obstructions to navigable airspace to protect flights and surrounding structures. In certain cases, the FAA should be notified of proposed development pursuant to Section 77.11 of Federal Aviation Regulations. The notification of proposed development enables the FAA to provide a basis for:

- Evaluating the effect of the construction or alteration on operational procedures and proposed operational procedures;
- Determinations of the possible hazardous effect of the proposed construction or alteration of air navigation;
- Recommendations for identifying the construction or alteration in accordance with current Federal Aviation Administration Advisory Circular AC 70/7460-1K dated August 1, 2000, Obstruction Marking and Lighting¹⁰;

⁷ National Environmental Policy Act as amended [Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, § 4(b), Sept. 13, 1982 <http://ceq.eh.doe.gov/nepa/regs/nepa/nepaeqia.htm>.

⁸ US Code of Federal Regulations, Title 14, Chapter 1, Part 77 www.faa.gov and <http://www-psao.grc.nasa.gov/aboutus.html>, <http://www4.law.cornell.edu/uscode/>.

⁹ See Attachment A for FAA Form 7460-1 Notice of Proposed Construction and Alteration.

¹⁰ Advisory Circular AC 70/7460-1K dated August 1, 2000, Obstruction Marking and Lighting is available online at http://flashtechnology.info/ftp/pdf_files/regulations/AC70-7460-1K.pdf.

- Determining other appropriate measures to be applied for continued safety of air navigation; and
- Charting and other notification to airmen of the construction or alteration.

Certain projects that may affect public and military airports require notification to the FAA. Individual jurisdictions can request an FAA evaluation of proposed development when certain features appear to be potentially hazardous.

2.2 State Regulations, Standards and Noticing Requirements

California Environmental Quality Act (CEQA)¹¹

Under CEQA, lead agencies are required to consider airport hazards and air traffic patterns when assessing the environmental impacts of proposed projects. CEQA requires that discretionary projects be evaluated to determine whether the project would result in a hazard to people residing or working in the project area due to airport hazards or a change in air traffic patterns.

California Aeronautics Act¹²

The State Aeronautics Act provides for the right of flight over private property, unless conducted in a dangerous manner or at altitudes below those set by federal authority, and prohibits any use of a property that would interfere with the right of flight. Additionally, the act gives Caltrans and local governments the authority to protect airspace defined by FAR Part 77 criteria.

California Public Utilities Code¹³

Assembly Bill (AB) 93 as amended by Senate Bill (SB) 1896 established the Authority as of January 1, 2002, to ensure that the future regional airport system of San Diego County will provide for the region's growing economy as it competes in the expanding international and national markets. AB 93 required that the Authority adopt ALUCPs for the public airports in the County and coordinate airport planning of public agencies.

Military Noticing Requirements¹⁴

Safety compatibility criteria for military air bases are set forth through the Air Installations Compatible Use Zones (AICUZ) program (DOD-1977). The objective of this program is to encourage compatible uses of public and private lands in the vicinity of military airfields through the comprehensive planning process of local communities. Public Resources Code Section 21098 requires lead agencies to submit a notice to the military service that would be affected by a proposed General Plan Amendment; project of statewide, regional, or area wide significance; or a project that must be referred to the airport land use commission when the project is located within specific boundaries of a low-level flight path, military impact zone, or special use airspace. Noticing is required

¹¹ Public Resources Code 21000-21178; California Code of Regulations, Guidelines for Implementation of CEQA, Appendix G, Title 14, Chapter 3, §15000-15387. http://ceres.ca.gov/topic/env_law/ceqa/guidelines/

¹² Public Utilities Code, Section 21001 et seq. <http://www.leginfo.ca.gov/>

¹³ Public Utilities Code, Division 17, Sections 170000-170084 <http://www.leginfo.ca.gov/>

¹⁴ Public Resources Code Section 21098 and Government Code Section 65352

when a Notice of Preparation of an Environmental Impact Report is issued and when environmental documents are released for public review.

Government Code Section 65352 requires that prior to action by a legislative body to adopt or substantially amend a general plan; the lead agency shall refer the proposed action to various entities, including the branches of the United States Military that have provided the Office of Planning and Research with a mailing address, when the proposed action is:

- 1) Located within 1,000 feet of a military installation;
- 2) Is located beneath a low-level flight path; or
- 3) Within special use airspace as defined in Section 21098 of the Public Resources Code.

The County of San Diego provides notice to the military in accordance with the above stated requirements. Should a conflict be identified by a military agency in response to a notice, the conflict would be evaluated for its potential to result in significant environmental impacts. These impacts could be related to airspace/flight hazards or could be related to land use compatibility issues. Due to the variety of potential issues that could be related to a proposed project near military facilities, no specific significance guideline is provided for military airports. Significant impacts to military airspace will be evaluated on a case-by-case basis with input from the affected military branch.

3.0 TYPICAL ADVERSE EFFECTS

The areas of concern when addressing airport hazards are overflight, safety, airspace protection and land use compatibility. Dealing with these concerns at the project planning stage contributes to the overall safety of passengers, pilots, and crews on flights and to the safety of people on the ground. Both air and ground hazards can have serious human safety and quality of life impacts.

3.1 Air Hazards

Air hazards jeopardize the safety of an airborne aircraft and expose passengers, pilots and crews to danger. Examples of air hazards include tall structures, glare-producing objects, bird and wildlife attractants, radio waves from communication centers, or other air obstructions that have the potential to interfere with take-off or landing procedures, posing a risk to aircraft.

3.2 Ground Hazards

Ground hazards jeopardize the safety of current and future residents and/or workers in the vicinity of an airport. The most obvious ground hazard is a flight-related accident, which may produce a serious, immediate risk to those residing in or using areas adjacent to the airport. Most accidents occur during take-off and landing. Therefore, the higher the density around an airport, the higher the hazard risk. To avoid these adverse effects, proposed land uses around airports and airport expansions must be reviewed for consistency with Federal, State, and local requirements.

4.0 GUIDELINES FOR DETERMINING SIGNIFICANCE

The following significance guidelines should guide the evaluation of whether a significant impact related to airport hazards will occur as a result of project implementation. A project will generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary. Conversely, if a project does not propose any of the following, it will generally not be considered to have a significant effect related to airport hazards, absent specific evidence of such an effect:¹⁵

4.1 Projects Near Public Airports with an Adopted ALUCP or CLUP

The project is located within an established AIA for a public or public use airport and proposes a development intensity, flight obstruction, or other land use that conflicts with the ALUCP or CLUP (if no ALUCP is adopted) and as a result, the project may result in a significant airport hazard.

4.2 Projects Near Airports not subject to an ALUCP or CLUP

The project is located within 2 miles of a public or public use airport or within 1 mile of a private airport, and proposes any of the following:¹⁶

- a. Residential densities inconsistent with the California Airport Land Use Planning Handbook's Safety Compatibility Criteria Guidelines for Maximum Residential Density (Table 3) and as a result, the project may result in a significant airport hazard.*

¹⁵ The Guidelines in Section 4.0 reference land use density, intensity and compatibility standards from the California Airport Land Use Planning Handbook (January 2002). If, in the future, the California Airport Land Use Planning Handbook is updated from the January 2002 version, a project would need to comply with the guidelines that are in effect at the time the project is proposed.

¹⁶ The distances from public and private airports are provided as guidelines to determine the significance of airport related hazards impacts. However, if airport specific information is obtained that indicates greater or lesser distance or density standard could cause a potential airport related hazard, the airport specific information will substitute for the stated distance guidelines.

- b. Non-residential land uses that exceed the California Airport Land Use Planning Handbooks Safety Compatibility Criteria Guidelines for Maximum Non-Residential Intensity (Table 4) and as a result, the project may result in a significant airport hazard.**
- c. An incompatible use identified in the California Airport Land Use Planning Handbook's Safety Compatibility Criteria Guidelines for Safety Compatibility Zones – Prohibited Uses (see Table 5) and as a result, the project may result in a significant airport hazard.**

Table 3 - Maximum Residential Density

Current Setting	Safety Compatibility Zones ^a					
	(1) Runaway Protection Zone	(2) Inner Approach/ Departure Zone	(3) Inner Turning Zone	(4) Outer Approach/ Departure Zone	(5) Sideline Zone	(6) Traffic Pattern Zone
	Average number of dwelling units (du) per gross acre					
Rural Farmland / Open Space (Minimal Development)	0	Maintain current zoning if less than density Criteria for rural / suburban setting				No limit
Rural/Suburban (Mostly to Partially Undeveloped)	0	1 du per 10 – 20 ac.	1 du per 2 – 5 ac.	1 du per 2 – 5 ac.	1 du per 1 – 2 ac.	No limit
Urban (Heavily Developed)	0	0	Allow infill at up to average of surrounding residential area ^b			No limit

^a Clustering to preserve open land encouraged in all zones.

^b See Chapter 3 of the California Airport Land Use Planning Handbook (January 2002) for discussion of infill development criteria; infill is appropriate only if nonresidential uses are not feasible.

Table 4 - Maximum Non-Residential Intensity

Current Setting	Safety Compatibility Zones					
	(1) Runaway Protection Zone	(2) Inner Approach/ Departure Zone	(3) Inner Turning Zone	(4) Outer Approach/ Departure Zone	(5) Sideline Zone	(6) Traffic Pattern Zone
	Average number of people per gross acre ^a					
Rural Farmland / Open Space (Minimal Development)	0 ^b	10 – 25	60 – 80	60 – 80	80 – 100	150
Rural / Suburban (Mostly to Partially Undeveloped)	0 ^b	25 – 40	60 – 80	60 – 80	80 – 100	150
Urban (Heavily Developed)	0 ^b	40 – 60	80 – 100	80 – 100	100 – 150	No limit ^c
	Multipliers for above numbers ^d					
Maximum Number of People per Single Acre	x 1.0	x 2.0	x 2.0	x 3.0	x 2.0	x 3.0
Bonus for Special Risk-Reduction Bldg. Design	x 1.0	x 1.5	x 2.0	x 2.0	x 2.0	x 2.0
^a Also see Table 3 for guidelines regarding uses which should be prohibited regardless of usage intensity. ^b Exceptions may be permitted for agricultural activities, roads, and automobile parking provided that FAA criteria are satisfied. ^c Large stadiums and similar uses should be prohibited. ^d Multipliers are cumulative (e.g. maximum intensity per single acre in inner safety is 2.0 times the average intensity for the site, but with risk-reduction building design is 2.0 x 1.5 = 3.0 times the average intensity).						

Table 5 - Safety Compatibility Zones – Prohibited Uses¹⁷

SAFETY COMPATIBILITY ZONE	PROHIBITED USES
Zone 1 Runway Protection Zone	<ul style="list-style-type: none"> • Prohibit all new structures • Prohibit residential land uses • Avoid nonresidential uses except if very low intensity in character and confined to the sides and outer end of the area
Zone 2 Inner Approach/ Departure Zone	<ul style="list-style-type: none"> • Prohibit residential uses except on large, agricultural parcels • Limit nonresidential uses to activities which attract few people (uses such as shopping centers, most eating establishments, theaters, meeting halls, multi-story office buildings, and labor-intensive manufacturing plants unacceptable) • Prohibit children's schools, day care centers, hospitals, nursing homes • Prohibit hazardous uses (e.g. aboveground bulk fuel storage)
Zone 3 Inner Turning Zone	<ul style="list-style-type: none"> • Limit residential uses to very low densities (if not deemed unacceptable because of noise) • Avoid nonresidential uses having moderate or higher usage intensities (e.g., major shopping centers, fast food restaurants, theaters, meeting halls, buildings with more than three aboveground habitable floors are generally unacceptable) • Prohibit children's schools, large day care centers, hospitals, nursing homes • Avoid hazardous uses (e.g. aboveground bulk fuel storage)
Zone 4 Outer Approach/ Departure Zone	<ul style="list-style-type: none"> • In undeveloped areas, limit residential uses to very low densities (if not deemed unacceptable because of noise); if alternative uses are impractical, allow higher densities as infill in urban areas • Limit nonresidential uses as in Zone 3 • Prohibit children's schools, large day care centers, hospitals, nursing homes
Zone 5 Sideline Zone	<ul style="list-style-type: none"> • Avoid residential uses unless airport related (noise usually also a factor) • Allow all common aviation-related activities provided that height-limit criteria are met • Limit other nonresidential uses similarly to Zone 3, but with slightly higher usage intensities • Prohibit children's schools, large day care centers, hospitals, nursing homes
Zone 6 Traffic Pattern Zone	<ul style="list-style-type: none"> • Allow residential uses • Allow most nonresidential uses; prohibit outdoor stadiums and similar uses with very high intensities • Avoid children's schools, large day care centers, hospitals, nursing homes
<p>Definitions: As used in this table, the follow meanings are intended: <i>Allow:</i> Use is acceptable <i>Limit:</i> Use is acceptable only if density/intensity restrictions are met <i>Avoid:</i> Use generally should not be permitted unless no feasible alternative is available <i>Prohibit:</i> Use should not be permitted under any circumstances <i>Children's Schools:</i> Through grade 12 <i>Large Day Care Centers:</i> Commercial facilities as defined in accordance with state law; for the purposes here, family day care homes and noncommercial facilities ancillary to a place of business are generally allowed. <i>Aboveground Bulk Storage of Fuel:</i> Tank size greater than 6,000 gallons (this suggested criterion is based on Uniform Fire Code criteria which are more stringent for larger tank sizes)</p>	

¹⁷ The prohibitions are pursuant to the California Airport Land Use Planning Handbook, Chapter 9, pp 9-44-45, Basic Safety Compatibility Qualities, Table 9B.

4.3 Airport Projects that May Expand Existing Compatibility Zones

The project would involve airport improvements or operational changes that would render existing or approved land uses incompatible with an applicable ALUCP or CLUP or for airports without an ALUCP or CLUP would render existing or approved land uses incompatible with the California Airport Land Use Planning Handbook's Safety Compatibility Criteria Guidelines for Maximum Residential Density, Maximum Non-Residential Intensity, or Safety Compatibility Zones-Prohibited Uses (Tables 3, 4 & 5) and as a result, the project may result in a significant airport hazard.

4.4 Conflicts with FAA Regulations

The proposed project is determined by the FAA to constitute a hazard to aviation based on FAA review of Form 7460-1, is inconsistent with current FAA Heliport Design Criteria for Heliports not subject to an ALUCP or CLUP, or conflicts with FAA rules or regulations related to airport hazards and as a result, the project may result in a significant airport hazard.¹⁸

The significance guidelines listed in sections 4.1 to 4.4 have been selected for the following reasons:

Guidelines 4.1 through 4.3 are all related to compliance with adopted ALUCPs, CLUPs, and the California Airport Land Use Planning Handbook. These guidelines are based on FAA regulations and regulatory requirements to consider land use compatibility around airports. The ALUCPs and CLUPs are largely based on requirements provided by the California Airport Land Use Planning Handbook. The California Airport Land Use Planning Handbook was developed based on FAA regulations that have established compatible land use and density criteria based on recorded crash patterns.

Significance guideline 4.4 is based on FAA evaluation of the project and the identification of a conflict with FAA rules and regulations that could result in potential aeronautical hazards. FAA notification is generally provided using the form, "Notice of Proposed Construction and Alteration" (Form 7460-1). The guideline also allows for consideration of other forms of information which FAA may provide relative to airport hazards. FAA evaluation would occur where the project proposes certain components that trigger FAA notification such as projects that exceed a specified height, that could create electronic or visual hazards, and that could increase the attraction of wildlife around airports. There are no specific FAA standards for visual or electronic hazards and potential hazards are evaluated by the FAA on a case-by-case basis. The FAA Advisory Circular 150/5200-33A dated July 27, 2004, Hazardous Wildlife Attractants On

¹⁸ Exceedance of this guideline typically requires project notification to the FAA using Form 7460-1 and an FAA response that identifies a particular aviation hazard. Details regarding when FAA notification is required can be found in Section 1.3.2 of this document under the heading, Obstruction Standards.

or Near Airports¹⁹ provides guidance regarding the land uses that have the potential to attract hazardous wildlife on or near public use airports. The main concern with land uses that would increase the attraction of birds and other wildlife is the risk to aircraft from increased wildlife strikes.

5.0 STANDARD MITIGATION AND PROJECT DESIGN CONSIDERATIONS

When a project would have a potentially significant impact related to airport hazards, project redesign would typically be required to conform to airport planning standards (ALUCP, CLUP, California Airport Land Use Planning Handbook, FAA, etc.). Project redesign could include reduced density, height restrictions, a modified project that would be compatible with airport operations, or another solution that would result in compatibility with airport operations and safety standards. The adopted ALUCPs and CLUPs specify which safety zones permit certain residential densities as well as conditional allowances within a safety zone. For non-residential development the adopted ALUCPs and CLUPs specify floor area ratios (FAR) for permitted building size and coverage within certain safety zones.

Depending on the safety compatibility zone that a proposed project is located in, there may be building standards required to reduce the risk of airport hazards. Risk reduction construction may include building design features such as concrete walls, limited number and size of windows, upgraded roof strength, no skylights, enhanced fire sprinkler protection system, single-story height, and increased number of emergency exits. All considerations to mitigate potential hazards through construction standards must be reviewed by the appropriate agency including but not limited to: FAA, Caltrans Division of Aeronautics, Authority, and County of San Diego and may not be appropriate or feasible due to the level of risk involved.

Avigation easements (deed notices) provide disclosure for future property owners. Avigation easements are recorded documents that inform potential property owners that airplanes can fly above the property; that noise, vibration, currents and other effects of air, illumination and fuel consumption may occur due to aircraft usage of the air space above a property; and that the property must be developed in a manner consistent with the proposed usage of the airspace by aircrafts. An example of a standard avigation easement is included in Attachment C.

Effective January 1, 2004, California state statutes (Business and Professional Code Section 11010 and Civil Code Sections 1102.6, 1103.4 and 1353) require that as part of many residential real estate transactions, information be disclosed regarding whether the property is situated within an AIA. These state requirements apply to the sale or lease of newly subdivided lands and condominium conversions and to the sale of certain existing residential properties.

¹⁹ FAA Advisory Circular 150/5200-33A dated July 27, 2004, Hazardous Wildlife Attractants On or Near Airports is available online at [http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/51eb9ab12a224e8586256f160052c678/\\$FILE/150-5200-33A.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/51eb9ab12a224e8586256f160052c678/$FILE/150-5200-33A.pdf)

6.0 REFERENCES

California Department of Transportation Division of Aeronautics. California Airport Land Use Planning Handbook, January 2002.

California Education Code
Section 17215 and 81033.

California Public Resources Code, California Environmental Quality Act (PRC §21000-21178).

California Public Utilities Code, California Aeronautics Act, Section 21001 et seq. Authority, [Public Utilities Code, Division 17, Sections 170000-170084.

Cleary, Edward C. and Richard A. Dolbeer. Wildlife Hazard Management at Airports. 1999. Federal Aviation Administration (FAA) and United States Department of Agriculture (USDA). http://wildlife-mitigation.tc.faa.gov/public_html/EnglishManual/EngStart.pdf

FAA,

- Advisory Circular AC 70/7460-2K Proposed Construction or Alteration of objects that may Affect the Navigable Airspace
- FAA Form 7460-1 Notice of Proposed Construction or Alteration
- Advisory Circular AC150/5200-33A Hazardous Wildlife Attractants on or Near Airports
- Heliport Design Advisory Circular (AC 150/5390-2A)

San Diego Association of Governments

San Diego Regional Airport Authority (SDRAA), Airport Land Use Compatibility Plans (ALUCPs)

http://www.san.org/airport_authority/land_use_compatibility/alucp_documents.asp for

- San Diego International Airport-Lindbergh Field
- Gillespie Field
- NAS/MCAS Miramar
- McClellan-Palomar Airport
- Montgomery Field
- Brown Field
- Oceanside Municipal Airport
- Agua Caliente Airport
- Borrego Valley Airport
- Fallbrook Community Airpark
- Jacumba Airport
- Ocotillo Airport
- Ramona Airport

United States Code, National Environmental Policy Act (42 USC §4321), 1969.

United States Code of Federal Regulations Federal Aviation Regulations (FAR), Objects Affecting Navigable Airspace, Title 14, Chapter 1, Part 77.

United States Department of Defense, Air Installations Compatible Use Zones Program, 1977

FIGURE 2. SAFETY COMPATIBILITY ZONE EXAMPLES²⁰

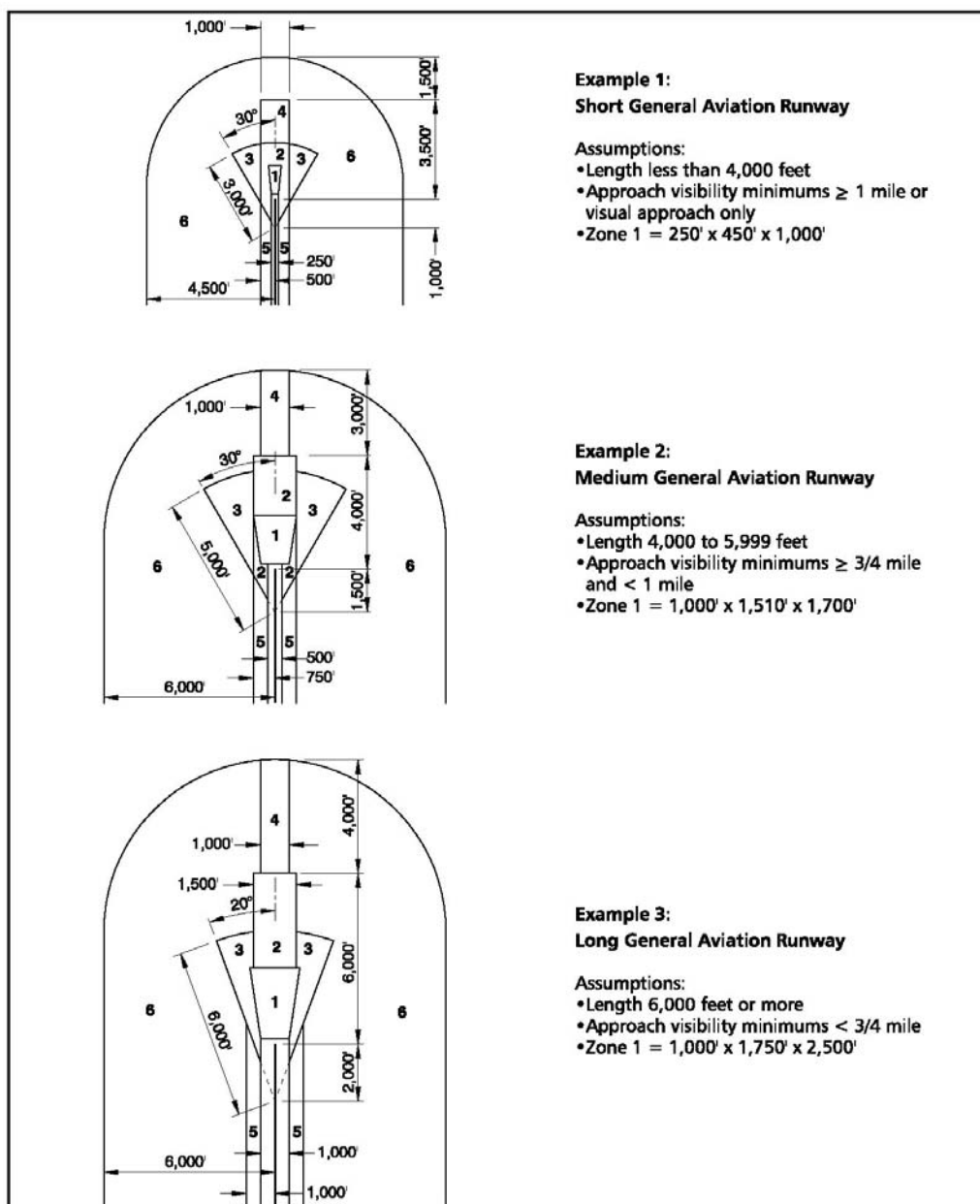
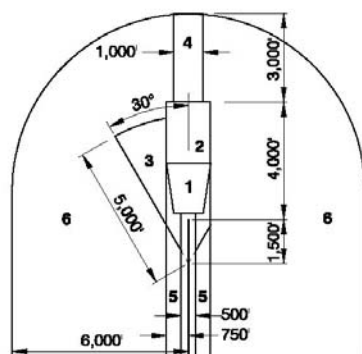


FIGURE 9K

Safety Compatibility Zone Examples

General Aviation Runways

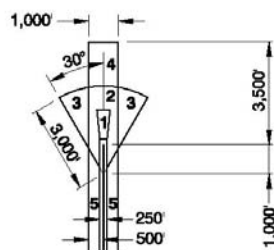
²⁰ These Safety Compatibility Zones are based on the Caltrans Division of Aeronautics Land Use Airport Planning Handbook which is available online at <http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/landuse.php>.



Example 4:
General Aviation Runway with
Single-Sided Traffic Pattern

Assumptions:

- No traffic pattern on right
- Length 4,000 to 5,999 feet
- Approach visibility minimums $\geq 3/4$ mile and < 1 mile
- Zone 1 = 1,000' x 1,510' x 1,700'



Example 5:
Low-Activity General Aviation Runway

Assumptions:

- Less than 2,000 takeoffs and landings per year at individual runway end.
- Length less than 4,000 feet
- Approach visibility minimums ≥ 1 mile or visual approach only
- Zone 1 = 250' x 450' x 1,000'

Legend

1. Runway Protection Zone
2. Inner Approach/Departure Zone
3. Inner Turning Zone
4. Outer Approach/Departure Zone
5. Sideline Zone
6. Traffic Pattern Zone

Notes:

- RPZ (Zone 1) size in each example is as indicated by FAA criteria for the approach type assumed. Adjustment may be necessary if the approach type differs.
- See Table 9A for factors to consider regarding other possible adjustments to these zones to reflect characteristics of a specific airport runway.
- See Tables 9B and 9C for guidance on compatibility criteria applicable with each zone.

These examples are intended to provide general guidance for establishment of airport safety compatibility zones. They do not represent California Department of Transportation standards or policy.

FIGURE 9K CONTINUED

NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

§77.13 Construction or alteration requiring notice.

(a) Except as provided in §77.15, each sponsor who proposes any of the following construction or alteration shall notify the Administrator in the form and manner prescribed in §77.17.

(1) Any construction or alteration of more than 200 feet in height above the ground level at its site.

(2) Any construction or alteration of greater height than imaginary surface extending outward and upward at one of the following slopes:

(i) 1:00 to 1 for horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) or this section with at least one runway more than 3,200 feet in actual length, excluding heliports.

(ii) 50 to 1 for horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with its longest runway no more than 3,200 feet in actual length, excluding heliports.

(iii) 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport specified in paragraph (a)(5) of this section.

(3) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an interstate highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 16 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a)(1) or (2) of this section.

(4) When requested by the FAA, any construction or alteration that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed a standard of Subpart C of this part.

(5) Any construction or alteration on any of the following airports (including heliports):

(i) An airport that is available for public use and is listed in the Airport Directory of the current Aeronautical Information Manual or in either the Alaska or Pacific Aeronautical Guide and Chart Supplement.

(ii) An airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and except for military airports, it is clearly indicated that airport will be available for public use.

(iii) An airport that is operated by an armed force of the United States.

(b) Each sponsor who proposes construction or alteration that is the subject of a notice under paragraph (a) of this section and is advised by an FAA regional office that a supplemental notice is required shall submit that notice on a prescribed form to be received by the FAA regional office at least 48 hours before the start of construction or alteration.

(c) Each sponsor who undertakes construction or alteration that is the subject of a notice under paragraph (a) of this section shall, within 5 days after that construction or alteration reaches its greatest height, submit a supplemental notice on a prescribed form to the FAA regional office having jurisdiction over the region involved, if—

(1) The construction or alteration is more than 200 feet above the surface level of its site; or

(2) An FAA regional office advises him that submission of the form is required.

§77.15 Construction or alteration not requiring notice.

No person is required to notify the Administrator for any of the following construction or alteration:

(a) Any object that would be shielded by existing structures of a permanent and substantial character or by natural terrain or topographic features of equal or greater height, and would be located in the congested area of a city, town, or settlement where it is evident beyond all reasonable doubt that the structure so shielded will not adversely affect safety in air navigation.

(b) Any antenna structure of 20 feet or less in height except one that would increase the height of another antenna structure.

(c) Any air navigation facility, airport visual approach or landing air, aircraft arresting device, or meteorological device, of a type approved by the Administrator, or an appropriate military service on military airports, the location and height of which is fixed by its functional purpose.

(d) Any construction or alteration for which notice is required by any other FAA regulation.

§77.17 Form and time of notice

(a) Each person who is required to notify the Administrator under §77.13 (a) shall send one executed form set of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area in which the construction or alteration will be located. Copies of FAA Form 7460-1 may be obtained from the headquarters of the Federal Aviation Administration and the regional offices.

(b) The notice required under §77.13 (a)(1) through (4) must be submitted at least 30 days before the earlier of the following dates—

(1) The date the proposed construction or alteration is to begin.

(2) The date an application for a construction permit is to be filed.

However, a notice relating to proposed construction or alteration that is subject to the licensing requirements of the Federal Communications Act may be sent to the FAA at the same time the application for construction is filed with the Federal Communications Commission, or at any time before that filing.

(c) A proposed structure or an alteration to an existing structure that exceeds 2,000 feet in height above the ground will be presumed to be a hazard to air navigation and to result in an inefficient utilization of airspace and the applicant has the burden of overcoming that presumption. Each notice submitted under the pertinent provisions of this part 77 proposing a structure in excess of 2,000 feet above ground, or an alteration that will make an existing structure exceed that height, must contain a detailed showing, directed to meeting this burden. Only in exceptional cases, where the FAA concludes that a clear and compelling showing has been made that it would not result in an inefficient utilization of the airspace and would not result in a hazard to air navigation, will a determination of no hazard be issued.

(d) In the case of an emergency involving essential public services, public health, or public safety that required immediate construction or alteration, the 30 day requirement in paragraph (b) of this section does not apply and the notice may be sent by telephone, telegraph, or other expeditious means, with an executed FAA Form 7460-1 submitted within five (5) days thereafter. Outside normal business hours, emergency notices by telephone or telegraph may be submitted to the nearest FAA Flight Service Station.

(e) Each person who is required to notify the Administrator by paragraph (b) or (c) of §77.13, or both shall send an executed copy of FAA Form 7460-2, Notice of Actual Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area involved.

ADDRESSES OF THE REGIONAL OFFICES

Alaska Region

AK
Alaskan Regional Office
Air Traffic Division, AAL-520
222 West An Avenue
Anchorage, AK 99513
Tel: 907-271-6993

Central Region

IA, KS, MO, NE
Central Regional Office
Air Traffic Division, ACE-520
60 East 12th Street
Kansas City, MO 64106
Tel: 816-426-3408 or 3409

Eastern Region

DC, DE, MD, NJ, NY, PA, VA, WV
Eastern Regional Office
Air Traffic Division, AEA-520
JFK International Airport
Fitzgerald Federal Building
Jamaica, NY 11430
Tel: 718-555-2616

Great Lakes Region

IL, IN, MI, MN, ND, OH, SD
Great Lakes Regional Office
Air Traffic Division, AGL-520
2300 East Devon Avenue
Des Plaines, IL 60018
Tel: 847-294-7668

New England Region

CT, MA, ME, NH, RI, VT
New England Regional Office
Air Traffic Division, ANE-520
12 New England Executive Park
Burlington, MA 01803-5299
Tel: 781-238-7220

Northwest Mountain Region

CO, ID, MT, OR, UT, WA, WY
Northwest Mountain Regional Office
Air Traffic Division, ANM-520
1601 Lind Avenue, SW
Renton, WA 98055-4056
Tel: 425-227-2020

Southern Region

AL, FL, GA, KY, MS, NC, PR
SC, TN, VI
Southern Regional Office
Air Traffic Division, ASD-520
1701 Columbia Avenue
College Park, GA 30337
Tel: 404-305-5685

Southwest Region

AR, LA, NM, OK, TX
Southwest Regional Office
Air Traffic Division, ASW-520
2601 Mesquite Boulevard
Fort Worth, TX 76137-0520
Tel: 817-222-5531

Western Pacific Region

HI, CA, NV, AZ, GU
Western-Pacific Regional Office
Air Traffic Division, AWP-520
19000 Aviation Boulevard
Hawthorne, CA 90260
Tel: 310-725-6557

²¹ Available online at <http://forms.faa.gov/forms/7460-1.pdf>

INSTRUCTIONS FOR COMPLETING FAA FORM 7460-1

PLEASE TYPE or PRINT

ITEM #1. Please include the name, address and phone number of a personal contact point as well as the company name.

ITEM #2. Please include the name, address and phone number of a personal contact point as well as the company name.

ITEM #3. New Construction would be a structure that has not yet been built.

Alteration is a change to an existing structure such as the addition of a side mounted antenna, a change to the marking and lighting, a change to power and/or frequency, or a change to the height. The nature of the alteration shall be included in **ITEM #21** "Complete Description of Proposal".

Existing would be a correction to the latitude and/or longitude, a correction to the height, or if filing on an existing structure which has never been studied by the FAA. The reason for the notice shall be included in **ITEM #21** "Complete Description of Proposal".

ITEM #4. If Permanent, so indicate. If Temporary, such as a crane or drilling derrick, enter the estimated length of time the temporary structure will be up.

ITEM #5. Enter the date that construction is expected to start and the date that construction should be completed.

ITEM #6. Please indicate the type of structure. **DO NOT LEAVE BLANK.**

ITEM #7. In the event that obstruction marking and lighting is required, please indicate type desired. If no preference, check "other" and indicate "no preference" **DO NOT LEAVE BLANK.** **NOTE:** High Intensity lighting shall be used only for structures over 500' AGL. In the absence of high intensity lighting for structures over 500' AGL, marking is also required.

ITEM #8. If this is an existing tower that has been registered with the FCC, enter the FCC Antenna Structure Registration number here.

ITEM #9 and #10. Latitude and longitude must be geographic coordinates, accurate to within the nearest second or to the nearest hundredth of a second if known. Latitude and longitude derived solely from a hand-held GPS instrument is **NOT acceptable**. A hand-held GPS is only accurate to within 100 meters (328 feet) 95 percent of the time. This data, when plotted, should match the site depiction submitted under **ITEM #20**.

ITEM #11. NAD 83 is preferred; however, latitude and longitude may be submitted in NAD 27. Also, in some geographic areas where NAD 27 and NAD 83 are not available other datums may be used. It is important to know which datum is used. **DO NOT LEAVE BLANK.**

ITEM #12. Enter the name of the nearest city and state to the site. If the structure is or will be in a city, enter the name of that city and state.

ITEM #13. Enter the full name of the nearest public-use (*not private-use*) airport or heliport or military airport or heliport to the site.

ITEM #14. Enter the distance from the airport or heliport listed in #13 to the structure.

ITEM #15. Enter the direction from the airport or heliport listed in #13 to the structure.

ITEM #16. Enter the site elevation above mean sea level and expressed in whole feet rounded to the nearest foot (e.g. 17'3" rounds to 17'; 17'6" rounds to 18'). This data should match the ground contour elevations for site depiction submitted under **ITEM #20**.

ITEM #17. Enter the total structure height above ground level in whole feet rounded to the next highest foot (e.g. 17'3" rounds to 18'). The total structure height shall include anything mounted on top of the structure, such as antennas, obstruction lights, lightning rods, etc.

ITEM #18. Enter the overall height above mean sea level and expressed in whole feet. This will be the total of **ITEM #16 + ITEM #17**.

ITEM #19. If an FAA aeronautical study was previously conducted, enter the previous study number.

ITEM #20. Enter the relationship of the structure to roads, airports, prominent terrain, existing structures, etc. Attach an 8-1/2" x 11" non-reduced copy of the appropriate 7.5 minute U.S. Geological Survey (USGS) Quadrangle Map MARKED WITH A PRECISE INDICATION OF THE SITE LOCATION. To obtain maps, contact USGS at 1-800-435-7627 or via internet at "<http://mapping.usgs.gov>". If available, attach a copy of a documented site survey with the surveyor's certification stating the amount of vertical and horizontal accuracy in feet.

ITEM #21.

- For transmitting stations, include maximum effective radiated power (ERP) and all frequencies.
- For antennas, include the type of antenna and center of radiation (Attach the antenna pattern, if available).
- For microwave, include azimuth relative to true north.
- For overhead wires or transmission lines, include size and configuration of wires and their supporting structures (Attach depiction).
- For each pole/support, include coordinates, site elevation, and structure height above ground level or water.
- For buildings, include site orientation, coordinates of each corner, dimensions, and construction materials.
- For alterations, explain the alteration thoroughly.
- For existing structures, thoroughly explain the reason for notifying the FAA (e.g. corrections, no record or previous study, etc.).

Filing this information with the FAA does not relieve the sponsor of this construction or alteration from complying with any other federal, state or local rules or regulations. If you are not sure what other rules or regulations apply to your proposal, contact local/state aviation and zoning authorities.

Paperwork Reduction Work Act Statement: This information is collected to evaluate the effect of proposed construction or alteration on air navigation and is not confidential. Providing this information is mandatory for anyone proposing construction or alteration that meets or exceeds the criteria contained in 14 CFR, part 77. We estimate that the burden of this collection is an average 19 minutes per response. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control number for this collection is 2120-0001. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, ABA-20.

NSN: 0052-00-012-0009

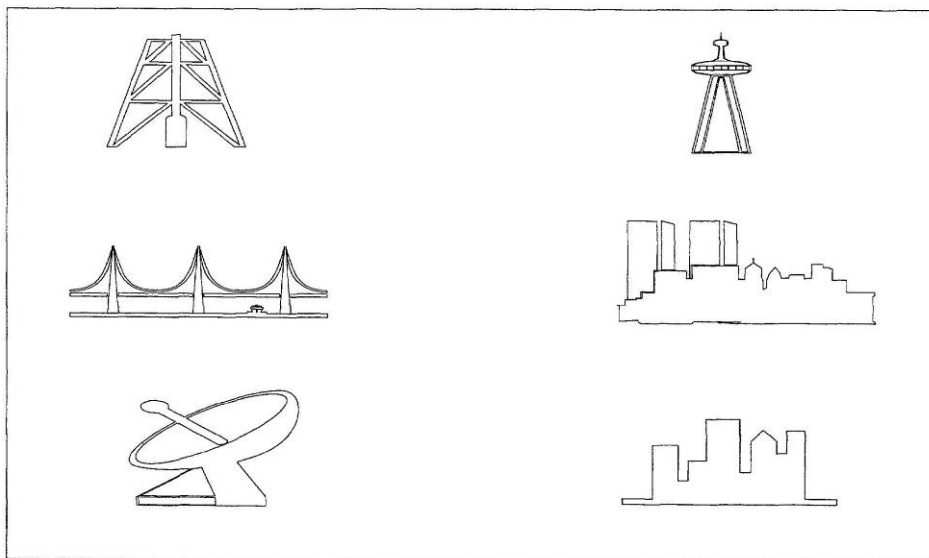


U.S. Department
of Transportation
**Federal Aviation
Administration**

ADVISORY CIRCULAR

AC 70/7460-2K

Proposed Construction or Alteration of Objects that May Affect the Navigable Airspace



Effective: March 1, 2000

Prepared by the Air Traffic
Airspace Management Program

²² Available online at
[http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/22990146db0931f186256c2a00721867/\\$FILE/ac70-7460-2K.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/22990146db0931f186256c2a00721867/$FILE/ac70-7460-2K.pdf)



U.S. Department
of Transportation

Federal Aviation
Administration

ADVISORY CIRCULAR

Subject: PROPOSED CONSTRUCTION OR ALTERATION OF OBJECTS THAT MAY AFFECT THE NAVIGABLE AIRSPACE

Date: 3/1/00

AC No: 70/7460.2K

Initiated by: ATA-400

1. PURPOSE.

This Advisory Circular (AC) provides information to persons proposing to erect or alter an object that may affect the navigable airspace. The AC also explains the requirement to notify the Federal Aviation Administration (FAA) before construction begins and FAA's responsibility to respond to these notices in accordance with Title 14 Code of Federal Regulations (14 CFR) part 77, Objects Affecting Navigable Airspace. Additionally, the AC explains the process by which to petition the FAA's Administrator for discretionary review of the determinations issued by the FAA.

2. CANCELLATION.

AC 70/7460-2J, Proposed Construction or Alteration of Objects That May Affect the Navigable Airspace, dated 11/29/95, is cancelled.

3. BACKGROUND/AUTHORITY.

a. 49 U.S.C. Section 44718 mandates, in pertinent part, that "The Secretary of Transportation shall require a person to give adequate public notice...of the construction or alteration, establishment or extension, or the proposed construction, alteration, establishment, or expansion, of any structure...when the notice will promote:

- (1) safety in air commerce, and
- (2) the efficient use and preservation of the navigable airspace and of airport traffic capacity at public-use airports."

b. To this end, 14 CFR Part 77 was issued prescribing that notice shall be given to the Administrator of certain proposed construction or alteration.

4. EFFECTIVE DATE.

This advisory circular becomes effective March 1, 2000.

5. NOTICES.

a. WHY IS NOTIFICATION REQUIRED?

In administering 14 CFR Part 77, the FAA's prime objectives are to ensure the safe and efficient use of the navigable airspace. The FAA recognizes that there are varied demands for the use of airspace, both by aviation and nonaviation interests. When conflicts arise out of construction proposals, the FAA emphasizes the need for conserving the navigable airspace. Therefore, early notice of proposed construction or alteration provides the FAA the opportunity to:

- (1) Recognize potential aeronautical hazards to minimize the adverse effects to aviation.
- (2) Revise published data or issue a Notice to Airmen (NOTAM) to alert pilots to airspace or procedural changes made as a result of the structure.
- (3) Recommend appropriate marking and lighting to make objects visible to pilots. Before filing FAA Form 7460-1, Notice of Proposed Construction or Alteration, construction sponsors should become knowledgeable in the different types of obstruction marking and lighting systems that meet FAA standards. Information about these systems can be obtained from the manufacturers. Proponents can then determine which system best meets their needs based on purchase, installation, and maintenance costs. The FAA will make every effort to accommodate the request.
- (4) Depict obstacles on aeronautical charts for pilotage and safety.

b. WHO MUST FILE NOTICE?

Any person or an agent who intends to sponsor construction is required to submit notice to the Administrator if the proposed construction or alteration falls within any of the following categories:

- (1) *Greater than 200 feet in height.* The proposed object would be more than 200 feet above ground level (AGL) at its location.

NOTE-

See FIG 1 and FIG 2.

Greater Than 200 Feet AGL at Object's Location [Over Land]

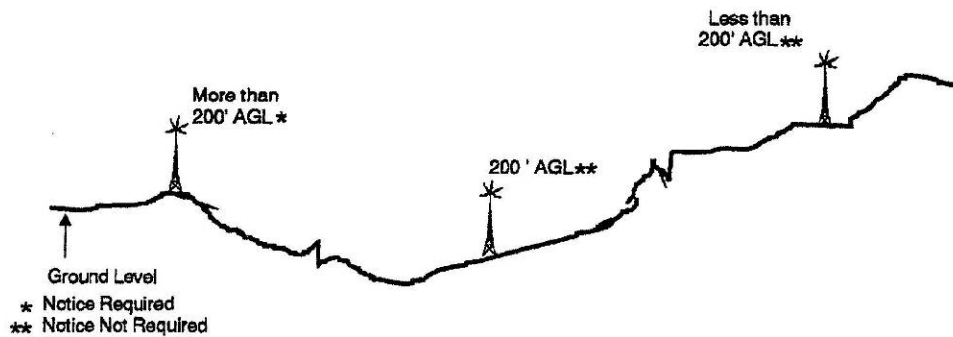


FIG 1

Greater Than 200 Feet AGL at Object's Location [Over Water]

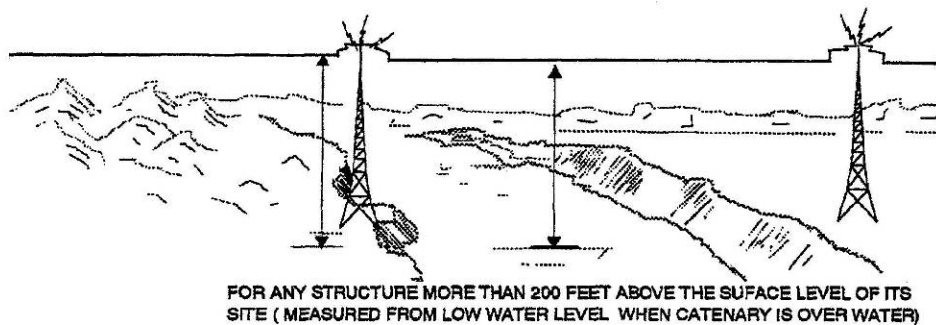


FIG 2

(2) *Near a Public-Use or Military Airport, Heliport, or Seaplane Base.* A public use airport, heliport or a seaplane base with visually marked seaplanes that is listed in the current Airport Facility Directory, the Alaska Supplement or the Pacific Chart Supplement, or near an airport operated by an armed force of the United States.

(a) *Airport or Seaplane Base.* The proposed object or alteration would be within:

(1) 20,000 feet of an airport or seaplane base with at least one runway more than 3,200 feet in length

and the object would exceed a slope of 100:1 horizontally (100 feet horizontally for each 1 foot vertically) from the nearest point of the nearest runway.

(2) 10,000 feet of an airport or seaplane base that does not have a runway more than 3,200 feet in length and the object would exceed a 50:1 horizontal slope (50 feet horizontally for each 1 foot vertically) from the nearest point of the nearest runway.

NOTE-

See FIG 3.

Object Penetrates Airport/Seaplanes Base Surface

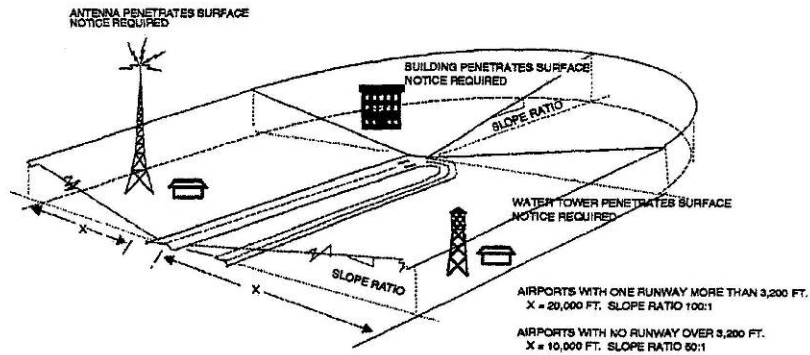


FIG 3

(b) *Heliport.* The proposed object would be within 5,000 feet of a heliport and would exceed a 25:1 horizontal slope (25 feet horizontally for each 1 foot vertically) from the nearest landing and takeoff area of that heliport.

NOTE-
See FIG 4.

Object Penetrates Heliport Surface

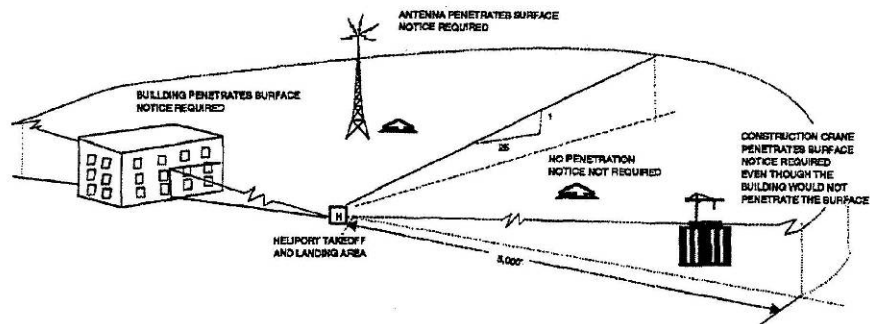


FIG 4

(3) *Highways and Railroads.* The proposed object is a traverse way which would exceed one or more of the standards listed in paragraphs a and b above, after the height of the object is adjusted upward as follows:

(a) Private road: 10 feet or the height of the highest mobile object that would traverse the roadway, whichever is greater.

(b) Other public roadways: 15 feet.

(c) Interstate Highways: 17 feet.

(d) Railroad: 23 feet.

(e) Waterway or any other thoroughfare not previously mentioned: an amount equal to the highest mobile object that would traverse the waterway or thoroughfare.

NOTE-
See FIG 5.

Proposed Object in a Traverse Way

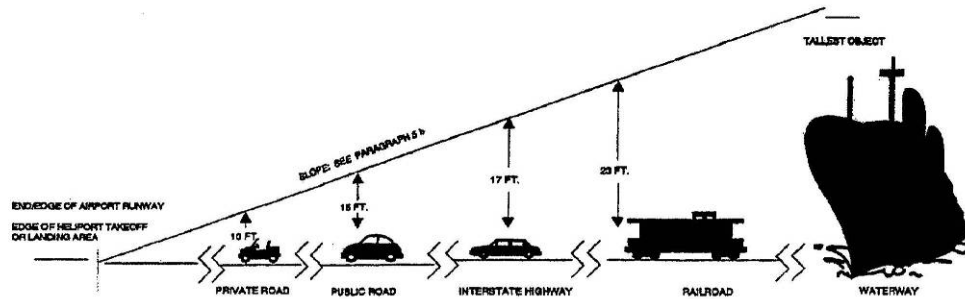


FIG 5

(4) *Objects on a Public-Use or Military Airport or Heliport.* The proposed construction or alteration would be on an airport or heliport, or any airport operated by an armed force of the United States, regardless of height or location.

(5) *When Requested by the FAA.* The FAA may request notice if available information indicates the proposal may exceed an obstruction standard or the proposal may cause electromagnetic interference to aircraft, particularly construction associated with an AM, FM, or TV station including a change in authorized frequency or transmitting power, may cause transmitted signals to be reflected upon ground-based or airborne air navigation communications equipment, or affect instrument procedures. In addition, notice may be requested when the proposal may affect an air traffic control procedure, may obstruct air traffic controllers' line of sight capability, or may affect air traffic control radar.

c. WHAT KIND OF STRUCTURES REQUIRE FAA NOTIFICATION?

The following are examples of structures requiring notice to the FAA.

- (1) Proposed construction or alteration of structures such as:
 - (a) Buildings.
 - (b) Antenna Towers.
 - (c) Roadways.
 - (d) Overhead communications and transmission lines as well as the height of the supporting structures.
 - (e) Water towers and the supporting structure.

(2) Construction equipment or other temporary structures such as:

- (a) Cranes.
- (b) Derricks.
- (c) Stockpiles of equipment.
- (d) Earth moving equipment.

d. WHEN MUST NOTICES BE FILED?

Notice must be submitted:

(1) At least 30 days before the earlier of the following:

- (a) The date the proposed construction or alteration is to begin, or
- (b) The date the application for a construction permit will be filed.

(2) On or before the date the application for construction is filed with the Federal Communications Commission (FCC), if the proposed structure is subject to FCC licensing requirements.

(3) Immediately by telephone or other expeditious means to the nearest FSS, with written notification submitted within 5 days thereafter, if immediate construction or alteration is required as in cases involving public services, health or safety.

(4) As early as possible in the planning stage but not less than 30 days before construction will begin.

e. HOW AND WHERE TO FILE NOTICE.

Notification of the proposal should be made on FAA Form 7460-1, Notice of Proposed Construction or Alteration. Additional information such as charts and/or drawings that accurately depict the proposed construction or alteration should be included to

facilitate the FAA's analysis of the project. The completed form should be mailed to the Manager, Air Traffic Division, of the regional office having jurisdiction over the area within which the construction or alteration will occur.

NOTE-

Information on regional addresses may be found on the FAA's website at www.faa.gov/ats/ata/ata-400/oeaaa.htm or contact the FAA listed in local telephone books under United States Government.

f. PENALTY FOR FAILING TO PROVIDE NOTICE.

Persons who knowingly and willfully violate the notice requirements of 14 CFR part 77 are subject to a civil penalty.

g. COMPLIANCE RESPONSIBILITY.

A notice filed with the FAA does not relieve the proponent of compliance with laws, ordinances or regulations of any other Federal, state or local governmental entity.

h. ASSOCIATED PUBLICATIONS.

The following publications contain obstruction criteria, marking and lighting standards and specifications for lighting and paint.

(1) *Federal Aviation Regulations 14 CFR, part 77, Objects Affecting Navigable Airspace*. This part sets forth the requirements for notice to the FAA of proposed construction or alteration and provides standards for determining obstructions to navigable airspace. 14 CFR, part 77 (Stock No. 050-007-00276-9) may be ordered from:

Superintendent of Documents
U. S. Government Printing Office
Washington, DC 20402

(2) *Advisory Circulars*. FAA advisory circulars are available free of charge from:

Department of Transportation
TASC
Subsequent Distribution Office,
SVC-121.23
Ardmore East Business Center
3341 Q 75th Avenue
Landover, MD 20785

(a) *AC 70/7460-1, Obstruction Marking and Lighting*, describes the standards for marking and lighting structures such as buildings, chimneys, antenna towers, cooling towers, storage tanks, supporting structures of overhead wires, etc.

(b) *AC 150/5190-4, A Model Zoning Ordinance to Limit Height or Objects Around Airports*, provides a

model-zoning ordinance to be used as a guide to control the height of objects around airports.

(c) *AC 150/5300-13, Airport Design*, includes planning information on electronic and visual navigational aids and air traffic control facility siting and clearance requirements that influence the physical layout of airports.

(d) *AC 150/5345-53, Airport Lighting Equipment Certification Program*, addendum lists equipment model numbers and manufacturer's part numbers in compliance with item (e) below. The addendum is located on the Internet at the Office of Airports homepage: <http://www.faa.gov/arp/arp/home.htm> under Advisory Circulars.

(e) *AC 150/5345-43, Specification for Obstruction Lighting Equipment*, contains specifications for equipment used in obstruction lighting systems.

(3) *Marking Specifications and Standards*. Aviation colors and paint standards and specifications are available from:

General Services Administration
Specifications Section
470 L'Enfant Plaza, Suite 8214
Washington, DC 20407

(4) *FAA Forms*. FAA forms are available free of charge from all FAA regional offices.

(a) *FAA Form 7460-1, Notice of Proposed Construction or Alteration*, is used to notify the FAA of proposed construction or alteration of an object that may affect the navigable airspace.

(b) *FAA Form 7460-2, Notice of Actual Construction or Alteration*, is used to notify the FAA of progress or abandonment, as requested on the form. The FAA regional office routinely includes this form with a determination when such information will be required. The information is used for charting purposes, to change affected aeronautical procedures and to notify pilots of the location of the structure.

i. ADMINISTRATIVE ASSISTANCE TO CONSTRUCTION PROPONENTS.

(1) Airspace specialists are available in each regional office to assist proponents in filing their notice. Proponents are encouraged to call in advance for appointments. Limited resources often prevent the specialist from responding spontaneously without advanced planning or preparation.

(2) To insure timely determinations, construction proponents must submit complete and accurate data. Lack of complete and accurate data could result in the return of the form. United States Geological Survey quadrangle maps are available at nominal costs to aid in determining

the geographical coordinates (latitude/longitude) and site elevation above mean sea level. The latitude/longitude information should be submitted in North American Datum of 1983. The quadrangle maps can be obtained from:

U.S. Geological Survey
Reston, Virginia 22092
Telephone No. (703) 860-6045

U.S. Geological Survey
District Branch
P.O. Box 25286, Bldg. #41
Denver, Colorado 80225
Telephone No. (303) 844-4169

(3) Airport planners are available for assistance with construction proposals on Federally obligated airports.

(4) Proposals for electronic transmitting devices should include frequency, effective radiated power (ERP), radiation center height (RCAMSL), and antenna characteristics such as number of bays, beam tilt, and null fill.

6. FAA's RESPONSIBILITY.

a. The FAA will acknowledge receipt of the notice.

b. After initial screening, the outcome of the screening will be sent to the filer and may state one of the following:

(1) The proposal is not identified as an obstruction and would not be a hazard to air navigation, or

(2) The proposal would be an obstruction unless reduced to a specified height and is presumed to be a hazard to air navigation pending further study. When this is indicated, the acknowledgement will either specify that the FAA has initiated further study, or the proponent may elect to reduce the height or request further study within (sixty) 60 days, in which event, the FAA will begin the study when the proponent so advises.

c. If further aeronautical study is initiated, public notice may be prepared and distributed for comments to those agencies, organizations, or individuals with known aeronautical interests to determine if the proposal would be a hazard to air navigation. State and local aviation authorities, as well as various military organizations of the Department of Defense, are also offered the opportunity to comment on the aeronautical effects of the proposal.

d. All responses received by the end of the specified comment period are analyzed by the FAA regional specialists for valid aeronautical comments and objections.

e. The office conducting the study may decide to conduct an informal airspace meeting with interested parties to discuss the effects of the proposal and to gather additional facts or information relevant to the study.

f. The FAA specialists may negotiate with the proponent during the study process to resolve any adverse

effect(s) on aeronautical operations. Many times, a minor reduction in height and/or relocation of a proposed structure will eliminate or sufficiently minimize adverse aeronautical effects that would permit the issuance of a Determination of No Hazard to Air Navigation.

g. After the aeronautical study is completed, the regional office will normally issue a:

(1) Determination of Hazard to Air Navigation; or

(2) Determination of No Hazard to Air Navigation.

h. An FAA determination is a conclusion based on the study of a structure's projected impact on the safe and efficient use of the navigable airspace by aircraft. It should not be construed as an approval or disapproval of the project.

i. The FAA usually recommends marking and/or lighting of a structure when its height exceeds 200 feet above ground level (AGL) or exceeds Part 77 obstruction criteria. However, the FAA may recommend marking and/or lighting of a structure that does not exceed 200 feet AGL or Part 77 obstruction standards because of its particular location.

7. HOW TO PETITION THE ADMINISTRATOR FOR DISCRETIONARY REVIEW.

a. When a determination is issued under 14 CFR Section 77.19 (except Section 77.19 c.(1)), or Section 77.35 or when a revision or extension is issued under Section 77.39 (c), you may petition the FAA Administrator for a review of the determination, revision, or extension if you:

(1) Are the sponsor of the proposed construction or alteration,

(2) Stated a substantial aeronautical objection to the proposal during an aeronautical study, or

(3) Have a substantial aeronautical objection but were not given an opportunity to state it.

b. The petition must be submitted within 30 days after the issue date of the determination, revision, or extension and must contain a full statement of the basis upon which it is made. Submit an original and two copies to:

Manager, Airspace and Rules
Division, ATA-400
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Nancy Kalinowski

John S. Walker

Program Director, Air Traffic
Airspace Management Program

[ATTACHMENT C]

STANDARD AVIGATION EASEMENT EXAMPLE

RECORDING REQUESTED BY DEPARTMENT OF GENERAL
SERVICES FOR THE BENEFIT OF THE COUNTY OF SAN DIEGO
PER GOVERNMENT CODE SECTION 27383

**WHEN RECORDED, PLEASE RETURN
THIS INSTRUMENT TO:**

(MAIL STATION A45)

Clerk, Board of Supervisors
San Diego County Administration Center
1600 Pacific Highway
San Diego, California 92101

SPACE ABOVE FOR RECORDER'S USE ONLY

AVIGATION EASEMENT

NO TRANSFER TAX DUE
**Assessor's Parcel
No.:**

Project:

W.O. No.: TE
Parcel No.: 2002-
Log No.:
Fund: MDT

the undersigned, herein designated GRANTOR(S) owner(s) of the hereinafter described lands, for a valuable consideration, the receipt of which is hereby acknowledged, hereby GRANT and CONVEY to **THE COUNTY OF SAN DIEGO**, a political subdivision of the State of California, an avigation easement and right-of-way for the use and benefit of the public for the free and unobstructed passage of aircraft in, through, and across all the airspace above all that real property in the County of San Diego, State of California, described as follows:

Parcel No. 2002-

(- -2001)

(ENG: :)

Together with the continuing right to cause or allow in all the airspace above the surface of Grantor's property such noise, vibrations, fumes, dust, fuel particles and other effects as may be caused by or result from the operation of aircraft; it being understood and agreed that Grantee intends to maintain and develop in such a manner that said airport and the easement granted herein will be used at all times and by every type of aircraft which is now in existence or which may be developed in the future for both commercial and noncommercial flights; and Grantor, for Grantor and the successors in interest and assigns of Grantor, does hereby fully waive and release any right or cause or action which they or any of them now have or may have in the future against Grantee, its successors and assigns, on account of or arising out of such noise,

vibrations, fumes, dust, fuel particles, and other effects heretofore and hereafter caused by the operation of aircraft in said airspace.

The term "aircraft" is defined for the purposes of this deed as any contrivance now known or hereafter invented, designed, or used for navigation of flight in air or space.

Grantor, for Grantor and the successors in interest and assigns of Grantor, covenants and agrees that neither they nor any of them will permit or suffer the use of Grantor's property in such manner as to create electrical interference with radio communication to or from any other aircraft, or as to make it difficult for aircraft pilots to distinguish between airport lights and other lights or as to impair visibility in the vicinity of the airport, or as to otherwise endanger the landing, taking off, or maneuvering of aircraft, it being understood and agreed that the aforesaid covenants and agreements shall run with the land.

Dated this _____ day of _____, 20 ____.

STATE OF _____ }
COUNTY OF _____ } SS

On _____ before me, the undersigned, a Notary Public in and for said State, personally
Appeared _____

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

FOR NOTARY STAMP OR SEAL

WITNESS my hand and official seal.

Signature: _____

This is to certify that the interest in real property conveyed by the foregoing deed or grant to the **County of San Diego**, a political subdivision, is hereby accepted on behalf of the Board of Supervisors of said County of San Diego pursuant to authority conferred by Resolution of said Board adopted on _____, and the Grantee consents to recordation thereof by its duly authorized officer.

Dated: _____

JOHN KROSS, Deputy Director
Real Estate Services Division
Department of General Services